

Monthly Report for July 2016

Submitted August 4, 2016

Governing Board Membership

There have been several changes and new appointments to the Governing Board. Superintendent Renee Foose resigned from the Governing Board and the term of office for Jennifer Mullinex and Brian Roberts has concluded. Steven Rizzi was reappointed for a second term. Finally, Governor Hogan appointed four new members to fill the remaining vacancies. The new members include:

- Clayton Wilcox, Ed.D., Superintendent of Schools, Washington County Public Schools
- A.J. Brooks, Esquire, Privacy Analyst, United States Department of Health and Human Services
- Christopher J. Biggs, Information Assurance Manager, Raytheon Company
- Scot Tingle, Ed.D., Assistant Principal, Snow Hill High School

Meeting - 2016 NCES STATS-DC Data Conference

Three Center staff attended the annual National Center on Education Statistics Data Conference, [STATS-DC](#), this past month in Washington, DC. The conference is an opportunity for professional networking, updates on federal and national activities affecting data collection and reporting, and information about the best new approaches in collecting, reporting, and using education statistics.

STATS-DC has a range of sessions targeted to Statewide Longitudinal Data Systems (SLDS) data collection, data linking beyond K-12, data management, data privacy, data quality, data standards (Common Education Data Standards [CEDS] or other standards), data use (analytical), data use (instructional), and fiscal data, as well as information about changes in how the U.S. Department of Education collects and uses data. There were a number of sessions at STATS-DC focused on data visualization. This is a concept Center staff have been wrestling with continuously and the sessions helped identify a number of tools and software available to aid in the representation and visualization of data.

Ross Goldstein was part of a panel discussion on the topic of: *Navigating Changing Statewide Longitudinal Data System Landscapes*. The discussion focused on each state's SLDS successes, barriers, and sustainability, as well as the support and resources provided by the Regional Educational Laboratories (RELs) through research and technical assistance projects. The discussion also addressed challenges to wider and more consistent SLDS use by both policymakers and researchers.

Data Gap Analysis

Staff is completing a comprehensive analysis of gaps in the MLDS data set, including the cause and impacts of those gaps. This document is being created at the request of the Governor's P20 Council, Committee on the Maryland Longitudinal Data System. Currently, the first draft of the analysis is complete and will be presented to the Research and Policy Advisory Board (RPB) this week for their

review and input. Once that is complete, the document will be finalized and provided to the P20 Council workgroup.

Examples of data gaps include:

- Workforce Data: 5 Year De-linking of student and workforce records; lack of federal employment data; lack of Standard Occupation Classification codes; and incomplete employer industry codes.
- PK-12 Data: Lack of student discipline data; lack of private school and homeschool data; and lack of school climate data.
- Higher Education Data: Lack of AccuPlacer test score and lack of non-credit courses.

MLDSC Publication Standards and Style Guide

Center leadership staff have begun developing publication standards to guide the development and publication of MLDSC documents. Staff have reviewed publication and style guides from our partner agencies including MSDE and University of Maryland. A draft of the Publication Standards and Style Guide will be reviewed with RPB and Data Governance Advisory Board before being presented to the Governing Board.

Dashboard Development

Center staff continue to work on a dashboard responsive to Research Agenda Question #20: What are the workforce outcomes of Maryland high school non-completers? The dashboard follows cohorts of students who began 9th grade in the same academic year. Each of the dashboards will allow the user to compare workforce data for high school graduates, high school dropouts, and high school persisters.

After analyzing the results of the initial data in the developed dashboard design, it was determined that there was little difference in the trajectories of the cohorts regardless of when they started high school. The more meaningful distinctions occur when comparing what happens to students in the workforce after high school. Accordingly, staff is now exploring presenting the data by showing workforce outcomes in relation to the time since the high school event. So instead of following students who were expected to graduate in 2008-2009 school year, the dashboard will now follow students one year post high school, 2 years post high school, and so on.

Research

The research team has continued refining the analyses on three research reports: (1) remedial coursework; (2) high school to workforce; and (3) college and workforce outcomes of high school persisters. The job searches for two additions to the research team (statistician and program manager) have been re-launched. An IRB protocol for the MLDS Center is being drafted for submission.

A number of meetings were held to discuss research opportunities using MLDS data.

1. Dr. Richard Lofton and Dr. Marcy Davis from Johns Hopkins University met to discuss a project examining the outcomes of students in racially diverse high schools.

2. Dr. Amber Bloomfield from the University of Maryland College Park Institutional Research office met to discuss use of the MLDS data for a research project examining student movement into and out of the state of Maryland for high school, college, and the workforce.
3. Dr. Richard Barth, Dean of the School of Social Work, met to discuss using the MLDS to conduct a rigorous evaluation of the Promise Heights Initiative, a US Department of Education funded project aimed at improving students' educational outcomes in West Baltimore.
4. A meeting with the MHEC Research Staff and Data Advisory Group to discuss the use of MLDS data to provide wage outcome information to postsecondary institutions for their degree earners.

System Management

MSDE Data Center

1. Staff will be testing the change over to a separate domain from the current centralized domain with MSDE.
2. Staff is continuing to develop and refine the audit logs as required under the Data Security and Safeguarding Plan (DSSP). Aggregate logs are being implemented and staff has developed an application for easy analysis of the audit logs. Staff is also conducting ongoing review of the audit logs.
3. Offsite Backup – The Center is using Amazon Web Services (AWS) for its offsite backup. Staff are in process of testing to ensure that they are able to restore operations from the backup. Staff are also having discussion with DoIT for their future plans for offsite backup.
4. Security Audit – The independent Security Audit is continuing. The auditors have completed vulnerability testing and submitted their interim report. Staff will be reviewing and working with the auditors to finalize this report. Next, the auditors will begin phase 2 of the audit which includes Penetration Testing.

Department of Information Technology (DoIT) Enterprise Model

Part of DoIT's Statewide IT Master Plan is to move the State away from the current distributed model of information technology to an enterprise model. With the current distributed model, each agency develops and implements its own internal IT operations to support the needs of the agency. The enterprise model will establish a consistent, high quality baseline operations that will allow agencies to focus on their missions. Investments will be made in a way that maximizes value for multiple or all state agencies.

There are two aspects of the enterprise model that MLDS Center is working to implement. As has been discussed in past reports, staff has been working with DoIT to implement the changeover to a managed firewall solution. The schedule is to implement the firewall hosting services in late August. This process is being closely coordinated with the IT staff at MSDE, which is also moving to the managed firewall solution at the same time.

The other component of the enterprise model is data center backup. DoIT is configuring and implementing a backup solution (a product called CommVault) at the MSDE data center for all of MSDE and MLDS local backups. This will replace the current backup solution (Avamar). The new backup solution should be completed in early September.

New Database Schema

As mentioned in last month's report, staff have been working to implement a new database schema. The new schema will greatly simplify the database model by significantly reducing the number of tables and reorganizing the structure so that data from a particular agency and collection are located in the same table. This will allow for easier data loading and facilitate an end-to-end data quality assurance process. Further, the new schema will be much easier for researchers to understand, use and analyze. Rahul Cheriya and Bob Murphy have worked very hard over the past month and have managed to load all of the existing data into the new database schema. As new data are received from the agencies, those data will be loaded in the new schema.